



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,120	08/21/2001	Junji Yoshida	MTS-3271US	4925

7590 08/05/2005  
RATNER AND PRESTIA  
One Westlakes, Berwyn  
Suite 301  
P.O. Box 980  
Valley Forge, PA 19482-0980

EXAMINER

RYMAN, DANIEL J

ART UNIT PAPER NUMBER

2665

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

<b>Office Action Summary</b>	<b>Application No.</b> 09/934,120	<b>Applicant(s)</b> YOSHIDA ET AL.	
	<b>Examiner</b> Daniel J. Ryman	<b>Art Unit</b> 2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 June 2005.  
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 5-8, 36, 39 and 48 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1, 2, 5-8, 36, 39 and 48 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 21 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☒ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/2/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. Figures 1-6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it contains legal terminology.

Correction is required. See MPEP § 608.01(b).

4. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification

Art Unit: 2665

are: on page 5, line 16, "transmission gitter" should be "transmission jitter" and on page 7, lines 22-24, "softwares" should be "software".

5. The disclosure is objected to because of the following informalities: on page 62, line 13, "forward to step 116" should be "forward to step 117" and on page 77, line 17, "204" should be "2404".

Appropriate correction is required.

### *Claim Objections*

6. Claim 1 is objected to because of the following informalities: in line 2, "pair of data of" should be "pair of data consisting of"; in line 4, "means of investigating" should be "means for investigating"; and in line 10, "outputting means of producing" should be "outputting means for producing". Appropriate correction is required.

7. Claim 5 is objected to because claim 5 depends upon claims 3 and 4, which are withdrawn. Appropriate correction is required.

8. Claim 36 is objected to because of the following informalities: in line 3, "means of investigating" should be "means for investigating"; in line 4, "of said time stamp" should be "of a time stamp"; in line 5, "in said source packet" should be "in a source packet"; in line 6, "unifying said source packets" should be "unifying a plurality of said source packets"; in line 9, "outputting means of producing" should be "outputting means for producing"; and in lines 12-13, "outward, of the transmitting" should be "outward of the transmitting". Appropriate correction is required.

9. Claim 39 is objected to because of the following informalities: in line 4, "means of investigating" should be "means for investigating"; in line 5, "of said time stamp" should be "of

Art Unit: 2665

a time stamp”; in line 6, “in said source packet” should be “in a source packet”; in line 7, “unifying said source packets” should be “unifying a plurality of said source packets”; in line 10 “outputting means of producing” should be “outputting means for producing”; and in lines 13-14, “outward, of the transmitting” should be “outward of the transmitting”. Appropriate correction is required.

10. Claim 48 is objected to because of the following informalities: in line 4 “means of investigating” should be “means for investigating” and in line 10 “outputting means of producing” should be “outputting means for producing”. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1, 2, 5-8, and 48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claims 1 and 48 discloses that the claim is “a transmitting apparatus/method for transmitting a source packet;” however, the body of the claim discloses that a “transmission packet” is formed from received “source packets” and then transmitted. Therefore, it is the transmission packet and not the source packet that is transmitted. Applicant should change “a transmitting apparatus/method for transmitting a source packet” to “a transmitting apparatus/method for transmitting a packet formed from source packets”.

*Claim Rejections - 35 USC § 103*

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1, 5-7, 36, 39, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rijckaert et al. (USPN 6,801,544).

16. Regarding claims 1, 36, 39, and 48, Rijckaert discloses a transmitting apparatus and method for transmitting a transmission packet formed from source packets (SP) constructed of a pair of data of a source packet data (ref. 85 and 86: TP1 and TP2) and a source packet header (ref. 87 and 88: SPH) including a time stamp (Fig. 10 and col. 11, lines 42-55), comprising: unifying source packets (transmit source packets in same isochronous packet) that are inputted in series to output as one unit of transmission packet data (BP) (Fig. 10 and col. 11, lines 42-55); and data outputting means of producing a transmission packet by adding predetermined additional information (ref. 8: CIP header and ref. 90: BP header) to said outputted transmission packet data and outputting said produced transmission packet outward (Fig. 10 and col. 11, lines 42-55).

Rijckaert does not expressly disclose transmission packet generating means for investigating values of a predetermined portion of said time stamp included in said source packet when said source packet is inputted and unifying source packets that have a same value for said predetermined portion. However, Rijckaert does disclose that the time stamps indicate the time of arrival of the packets at the source device (col. 11, lines 42-55). Rijckaert also discloses that

Art Unit: 2665

the time stamps attached to the source packets (application packets) allow delivery with constant transport delay (col. 11, lines 32-38). Finally, Rijckaert discloses grouping packets based on coding and decoding since this requires less modification of the transport stream (col. 4, lines 61-col. 5, line 5) where timestamps are used for decoding (col. 8, lines 17-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have transmission packet generating means for investigating values of a predetermined portion of said time stamp included in said source packet when said source packet is inputted and unifying source packets that have a same value for said predetermined portion in order to group packets having a decoding relationship, as evidenced by similar timestamps, since this requires less modification of the transport stream.

17. Regarding claim 5, Rijckaert discloses that K units of said source packets having variable length or fixed length with  $K \geq 1$  are inputted as a group to said transmission packet generating means (col. 11, lines 42-55).

18. Regarding claim 6, Rijckaert discloses that said predetermined additional information is a CIP header, an isochronous header, a header CRC and a data CRC (col. 11, lines 42-55), said data outputting means has: a CIP reader adding means of adding said predetermined CIP header to said outputted transmission packet data (col. 11, lines 42-55); and an IEEE1394 interface for producing said transmission packet by further adding said isochronous header, said header CRC and said data CRC to the transmission packet data to which said predetermined CIP header is added and outputting said produced transmission packet outward (col. 11, lines 42-55).

19. Regarding claim 7, Rijckaert discloses that data of said source packet are a transport stream packet of MPEG (col. 11, lines 56-63).

Art Unit: 2665

20. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rijckaert et al. (USPN 6,801,544) as applied to claim 1 above, and further in view of Applicant's admitted prior art.

21. Regarding claim 2, Rijckaert does not expressly disclose that said transmission packet generating means outputs (N-1) units of dummy transmission packet data to said data outputting means, in the case where difference between values of said predetermined portions of said time stamps included in two source packets inputted in series is N; however, Rijckaert does disclose that the difference between the time stamps of two packets should be fixed to a high degree (col. 7, lines 46-50). Applicant teaches, as prior art, sending an "empty packet" in order to adjust the transmission rate (page 4, lines 21-24). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have transmission packet generating means output (N-1) units of dummy transmission packet data to said data outputting means in the case where difference between values of said predetermined portions of said time stamps included in two source packets inputted in series is N in order to ensure that the time stamps of two packets retain a particular difference.

Rijckaert in view of Applicant does not expressly disclose that  $N \geq 2$ ; however, Rijckaert in view of Applicant does disclose a value for N (difference between time stamps) (Rijckaert: col. 7, lines 46-50). It is generally considered to be within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re



Art Unit: 2665

Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Since Rijckaert in view of Applicant disclose a value for N, it would have been obvious to one of ordinary skill in the art at the time of the invention to use any value of N, including  $N \geq 2$ , absent a showing of criticality by Applicant.

22. Regarding claim 8, Rijckaert does not expressly disclose that said time stamp is expressed with Cycle\_Count and Cycle\_Offset of CycleTimeRegister of IEEE1394 standards, and said predetermined portion is a portion of said Cycle Count; however, Rijckaert does disclose a time stamp (col. 11, lines 42-55). Applicant teaches, as prior art, that the time stamp is expressed with Cycle\_Count and Cycle\_Offset of CycleTimeRegister of IEEE1394 standards (page 6, lines 9-14) where it is implicit that this is the format for an MPEG packet transmitted over an IEEE 1394 bus. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the time stamp is expressed with Cycle\_Count and Cycle\_Offset of CycleTimeRegister of IEEE1394 standards since this is the format for an MPEG packet transmitted over an IEEE 1394 bus.

Rijckaert in view of Applicant suggests that the predetermined portion is a portion of said Cycle Count since Rijckaert discloses grouping signals with a decoding relationship (col. 4, lines 61-col. 5, line 5) and packets grouped of the same Cycle Count would have a decoding relationship since these packets are clustered together in time.

Art Unit: 2665

***Conclusion***

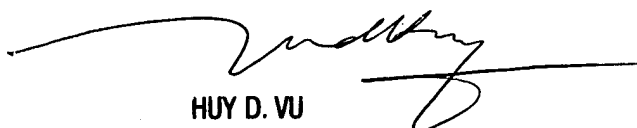
23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fujimori et al. (USPN 6,243,395) see Fig. 2; col. 2, lines 47-61; and col. 3, lines 43-48 which discloses grouping multiple source packets in a single isochronous frame.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 7:00-4:30 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DJR  
Daniel J. Ryman  
Examiner  
Art Unit 2665

  
HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600